



Mount Rainier National Park

Sister Mountain Project

Finding similarities and differences between Mount Rainier and Mt. Fuji

Overview

Mt. Fuji (Fuji-san in Japanese) which is the tallest mountain in Japan has been a sister mountain of Mount Rainier since April 30, 1936. Both of the mountains have similar and different characteristics in types of volcanoes, ecosystems, culture, and history. The students will explore these similarities and differences through presentations, research and videos of both mountains.

Grade Level

9 - 12

Objectives

Students will be able to:

- Recognize that the sister mountains have similar and different characteristics.
- Understand biological and cultural characteristics of Mount Rainier
- Develop sister mountain friendship by exchanging information.

Setting

Classroom, Computer room, Audio room, Email/letter exchange to Japanese sister school

Time Frame

One week, Four to Five class sessions

"Learn about Mt. Fuji (Video)"

"Develop questions about Mt. Fuji"

"Collect and organize data of Mount Rainier"

"Compare to two mountains"

"Display, Final Presentation"

Materials

Copies of:

Mt. Fuji check sheet

Compare sheet

Question sheet

	<p>Video “Let the blessings of Mt. Fuji be inherited in the future”</p> <p>Display boards, crayons or colored pencils, glue, scissors,</p>
Vocabulary	Andesite, Basalt, cap clouds, composite volcano, ecosystem, endangered species, etymology, exotic plants, environmental concern, natural hazard, silica
Standards	<ol style="list-style-type: none"> 1. The student understands the differences and similarities culture and nature of both mountains. <ol style="list-style-type: none"> 1.1. Understand different places have different culture and nature. 1.2. Use both languages to communicate and get information. 1.3. Organize general information of both mountains- size, visitor, climbing information, culture, books, arts, history, volcano, lava, ecosystem, nature, current issue. 1.4. Compare both data to find similarities and differences.
Background	<p><i>Mt. Fuji</i></p> <p>Mt. Fuji is the symbol of Japan and has provided a spiritual basis for the Japanese since ancient times. It is an active volcano (stratovolcano or composite cone), world renowned for its symmetry and serenity. From long history, more than 1500 years ago, Japanese people defined that the summit of Mt. Fuji is the entrance of heaven; many people climbed summit as to the purpose of visiting heaven. One religion developed called “Fujikou” trained at Mt. Fuji for the purpose of a religious austerity. Recent years, people prefer climbing mountain as pleasure activity more than religious reason. (However, night climbing is the most popular activity because people love to see sunrise from the summit and pray for fortune. It seems that Japanese still have spiritual feeling for the mountain.) Mt. Fuji is the place where there is a junction of four tectonic plates: Eurasian, Pacific, North America and Philippine. Magma around Mt. Fuji has been activated by tectonism by these plates and erupted for many times. There is no snow in summer and this mountain produces ninety tons of water every year.</p> <p><i>Fuji-yama, Fuji-san</i></p> <p>“Geisha, Fuji-yama” was misunderstood by the West which means is that Japan. Both of the phrases “yama” and “san” means mountain. Japanese usually have two pronunciations for one Chinese character. Mostly, Japanese call Mt.Fuji as “Fuji-san.” This suffix “san” has nothing to do with the Japanese title Name-san for a person.</p> <p><i>Shinto (Shintoism)</i></p> <p>It is a native Japanese religion which involves the worship of “Kami</p>

(gods/spirits of nature).” Many Japanese old practices have origins rooted in Shinto such as “love of nature,” “Physical cleanliness.”

Fist Japanese woman climber “Tatsu”

In 1832, Tatsu was just back from general service and decided to climb Mt. Fuji with the religious leader who was an ascetic of “Fujiokou.” Tatsu, when she was twenty four, she disguised herself as a man and hiked to obscure season because in those days, the hiking trail closed for women for the reason of that people thought women violated a sacred place. After her success, the trail was opened for women.

Thirty six views of Mt. Fuji

It is the most popular ukiyo-e (woodblock prints) series which created by Katsushika, Hokusai (1760-1849). His most recognized work is “The Great Wave at Kanagawa” can see big waves and minimized Mt. Fuji by dynamic design. After his death, his prints influenced many artists such as Vincent van Gogh and Paul Gauguin.

Song “Fuji-san” (1910)

This is accredited by Ministry of Education to be a required song which is taught in elementary school.

Relationship between Mount Rainier and Mt. Fuji

More than a hundred years ago, many Japanese (Issei) immigrated to Seattle, Washington. When they saw Mount Rainier at the first time, they were amazed by the mountain such shape and sacredness looked like Mt.Fuji. Therefore, they nicknamed Mount Rainier “Tacoma-Fuji” for a long time with a feeling of nostalgia.

In 1935, a National Park friendship started between two countries, and they exchanged rocks from each mountain; Mount Rainier and Mt.Fuji. The rock from Mt.Fuji has been displayed at the entrance of the Headquarters of Mount Rainier National Park. It is in a wood box made from the “sakura” or cherry tree, which is the Japanese national flower. The rock from Mount Rainier displayed at Mt. Fuji visitor center in Yamanashi prefecture, Japan.

In 2003, Two mountains officially concluded sister mountain partnership. Many cultural exchanges will be expected by this opportunity.

	<p><i>Video “Let the blessings of Mt.Fuji be inherited in the future” by Yamanashi Prefecture, Japan</i></p> <p>This is an educational video for the conservation of Mt. Fuji. It explains natural history and current issues. On this mountain, human impacts are the most serious problem, especially human waste. This video is usually showed to visitors on shuttle buses between the parking lot and trail head for the purpose of understanding environmental protection.</p> <p>(13 minutes)</p> <p><i>Video “Mount Rainier: A century of resource stewardship” by King County Library System</i></p> <p>In this video, Mount Rainier is introduced through three different themes: natural, cultural and recreational resources but do not lose sight of the overall context of the inherent fragility by visitor use and environmental hazards. This video was made for Mount Rainier National Park Centennial Celebration in 1999. (10 minutes)</p> <p><i>Stratovolcano</i></p> <p>A tall, conical volcano composed of layers of volcanic ash and lava that tends to be high in silica. Example of stratovolcanoes: Mt. Hood, Mount Rainier and Mt. St. Helens in the U.S., and “Mt.Fuji” in Japan.</p>
<p>Procedure</p>	<p>Learn About Mount Fuji – Day 1</p> <ol style="list-style-type: none"> 1. Students imagine what Mt. Fuji is by filling in the “Mt. Fuji Check Sheet”. 2. Watch video “Let the blessing of Mt. Fuji be inherited in the future” 3. Exchange the comments and questions to increase their interest. 4. Develop questions about Mt. Fuji by using the student comparison sheet. <p>Learn about Mount Rainier – Day 2</p> <ol style="list-style-type: none"> 1. Research the facts about Mount Rainier using the same questions as Mt. Fuji by using internet, books, videos, visiting, etc. 2. Collect and write down answers on the “Student Comparison Sheet”. 3. The teacher may utilize any of the PowerPoint Presentations with the students to increase their knowledge about Mount Rainier and Mount Fuji.

	<p>4. Organize the students into small groups based on mountain interest for presentations.</p> <p>Compare Mount Rainier and Mount Fuji – Day 3</p> <ol style="list-style-type: none"> 1. Compare two mountains 2. Organize the results and make presentation board. <p>Display and Presentation – Day 4</p> <ol style="list-style-type: none"> 1. Finalize the presentations and the students present their findings to the class.
Assessment	<ul style="list-style-type: none"> • Teacher creates a rubric based on presentation and content skills to be shared with the students for the presentation.
Adaptations	<ul style="list-style-type: none"> • Divide the students into nine groups and assign each group one topic to research. • See answer key sheet if you have no information of Mt. Fuji. • If students need more time to research or presentation, the timeframe should be rescheduled by teachers. • Sister mountain song will be no longer than four lines.
Extensions	<ul style="list-style-type: none"> • Make art of Mount Rainier to copy out thirty-six views of Mt. Fuji. • Display pictures of two mountains which look similar. • Planning to climb Mount Fuji or Mount Rainier if your school has a chance to visit a sister school. • Experience watching sunrise: <ul style="list-style-type: none"> -Plan overnight hike in your area and see sunrise at the summit -Share the Japanese spirituality of sunrise. • This lesson may be used to compare any mountain in the world. Take the basic structure of the student comparison sheets and either select the mountains or allow the students to select the mountains to compare and contrast.
References/ Resources	<p><i>Mount Rainier</i></p> <p>Blackwell, L., <u>Wildflowers of Mount Rainier</u>, Lone Pine Publishing, 2000.</p> <p>Kirk, R., Sunrise to Paradise; <u>The Story of Mount Rainier National Park</u>, University of Washington Press, 1999.</p> <p>Rohde, J&G., <u>Mount Rainier National Park: tales, trails, & auto tours.</u>, Mountain Home Books, 1996</p> <p>Smoot, J., <u>Adventure guide to Mount Rainier</u>, Falcon Publishing Inc., 1998</p>

Mt.Fuji

Fujisan Book (Japanese), Yamatokeikokusha, 2003

Mt.Fuji Guide, Mt. Fuji Volunteer Center, 2005

Terry, C., Hokusai's Thirty six views of Mt.Fuji, Toto Shuppan Tokyo, 1959

Zusetsu Fujisanhyakka (Japanese), Shinjinbutuouraisha, 2002

Internet

Mt.Fuji. http://en.wikipedia.org/wiki/Mt._Fuji

Mount Rainier. http://en.wikipedia.org/wiki/Mount_Rainier

Shinto. <http://en.wikipedia.org/wiki/Shinto>

Hokusai. <http://.wikipedia.org/wiki/Hokusai>

Video

Mount Rainier: A century of resource stewardship, King County Library System.

Let the blessings of Mt.Fuji be inherited in the future, Yamanashi prefecture, Japan. <http://www.youtube.com/watch?v=nXq8hsiiQjQ>